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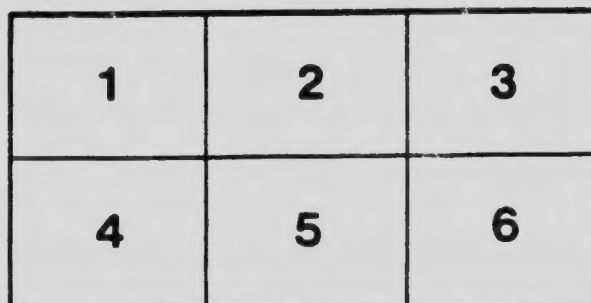
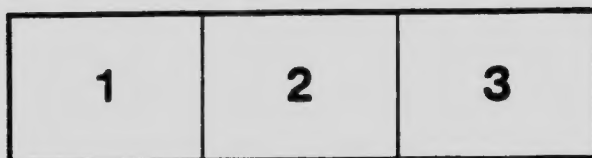
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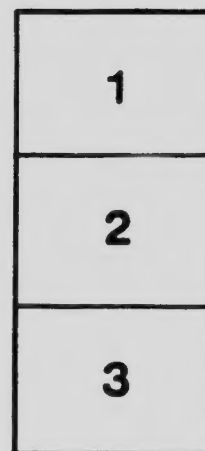
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University Location in British Columbia

A Summary of the Arguments
presented by the Lower Main-
land University Committee to
the University Sites Commission
appointed to fix the location
of the Provincial University of
British Columbia : : : : :



JUNE 1910

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PART I.

Introductory.

The Members of the University Location Commission.

Gentlemen: Upon hearing of the nomination of the University Sites Commission by the Provincial Government of British Columbia, representatives from all organizations and institutions of the Lower Mainland interested in the location of the Provincial University met, and, finding that they were agreed in their belief that the University would be placed with the greatest advantage in the Lower Mainland, formed a General Committee to investigate, arrange and present to the Commissioners any such data as might be of service in helping them to form their decision.

This General Committee accordingly desires to present to you the results of its investigations and the arguments based thereupon, realizing indeed that much of this information could be obtained by, and many of these arguments are already familiar to you, but with the hope that some new matter of interest and importance, which might otherwise have been overlooked, will thus be brought to your notice, and your task as a whole greatly facilitated.

The Committee has devoted itself mainly to the collecting and arranging of such information concerning the Lower Mainland as would naturally be of importance in its relation to both faculty and students of the Provincial University, aiming to show that the institution would have by far the greatest educational value, prosperity and influence if placed in this section of the Province. However, in addition, it has endeavored to collect such data concerning the establishment and progress of other universities, as might prove of some assistance in determining the present issue.

Therefore, this Committee has endeavoured, as far as possible, to present in fullest detail the true conditions as at present existing and the prospects for the future, with full knowledge that in questions of this nature each man's opinions are necessarily influenced by his own experience. Although our convictions may be influenced by enthusiasm for our own environment, still the people of the Lower Mainland are profoundly convinced that the success of the University depends in great measure upon its being placed in this locality.

Accordingly, Gentlemen, we beg leave to lay before you the case of the Lower Mainland.

PART II.

Population and Industry.

School centers in all the large cities are established on a basis of density of population. And it is an admitted fact that the most serious problem that confronts all school boards is the problem of keeping pace with municipal growth.

All over the American continent today are universities that are failing to fulfill the promises of their founders by being remotely located, out of the reach of those who cannot afford to travel miles to get to them, with their doors barred against the young man who has to work his way through college because the opportunities to work are limited by the commercial backwardness of the towns in which they stand.

The Lower Mainland of British Columbia is, and will always continue to be, the most populous section of the Province, and it is probable that it will eventually become the most thickly settled territory west of the Great Lakes. The present population of British Columbia is estimated at 350,000. Of this number of persons it is conservative to place the number residing in what is known as the Lower Mainland at two-thirds of the total.

The population of the various cities of the Lower Mainland, taken together with the estimated population of the agricultural districts of the Fraser River Valley, including Chilliwack, is most conservatively estimated as follows: Vancouver, 115,000; South Vancouver, 20,000; New Westminster, 15,000; Burnaby, 5,000; North Vancouver, 6,000; estimated population in agricultural districts, 50,000; total, 211,000.

There is no likelihood that the future development of the Province will disturb this ratio as it would be contrary to all the precedents established by growth elsewhere for the center of population to shift from this section since the causes that have contributed to its upbuilding are permanent in their nature.

The Lower Mainland of British Columbia today contains the greatest ocean port in Western Canada. James J. Hill, president of the Great Northern Railroad, recently pointed out the supremacy of the metropolis of the Province and predicted its future in the following words:

"In growth and commercial activity Vancouver has no equal on the Pacific Coast today. A thousand factors which I have not time to enumerate are contributing towards the development of this great western country—and I speak without any regard to invisible boundary lines. Seattle and Vancouver are destined to be vast centers. Vancouver with its wonderful hinterland will probably be the largest city. Mark my words, young

man, Burrard Inlet will be the greatest commercial port on the Pacific. I would venture all I own that its population will exceed half a million within fifteen years. Vancouver has not yet started on its forward career. I see a day coming when half a score of lines from Northern British Columbia will converge on Burrard Inlet. You have untold wealth in the seas, the greatest timber resources on the continent and mineral assets that will make British Columbia the greatest Province in the Dominion."

The industrial production of the Province during 1909, according to the Provincial Government Reports, averages \$315 per head of population—the highest of all the provinces of the Dominion. In the lumbering industry alone the employees reach a total of 27,000. Of this number 15,000 are employed on the Lower Mainland.

The following tables present conclusive evidence that the commercial growth of Vancouver has been uninterrupted:

Vancouver City taxation—

	Real property.	Improvements.	Rate.	Improvements taxed.
1901.....	\$12,792,530.00	\$ 7,440,600.00	16 mills	50% of value
1909.....	48,281,330.00	24,405,210.00	20 mills	25% of value
1910.....	76,927,720.00	29,644,755.00	20 mills	Nothing at all (Single tax)

The bank clearings.

Bank Clearings, Canada, Seven Cities.

	1899.	1909.
Montreal	\$794,109,924	\$1,866,649,000
Toronto	504,569,918	1,437,700,477
Winnipeg	107,786,798	770,649,322
Halifax	70,600,705	95,278,467
Vancouver	42,179,553	287,592,941
Victoria	33,506,489	70,695,882
Ottawa		173,181,993

For the first four months of 1910 the bank clearings for Vancouver totalled \$126,802,000.

Of the great harbors of the world, Burrard Inlet and the Fraser River probably are unequalled in the facilities they possess for both salt and fresh water harbors.

One hundred and fifty miles from the open Pacific, we are sheltered from the storms of that great ocean and from the force and immense precipitation of the cloud-laden southwest winds by the mountains of Vancouver Island and the more distant Olympian range, which rise to a height of seven thousand feet from the southern shore of the Straits of San Juan de Fuca, while to the north and west the Coast range affords equal protection to both harbours.

Within the First Narrows, known as the "Lion's Gate," the shore of the harbor proper (not including the North Arm of Burrard Inlet) extends to twenty-five miles, while the width in front of the C. P. R. Railway Depot is two and a quarter miles, the low water depth at the wharves being twenty-six feet, and in the stream fully thirty fathoms, the average tide being thirteen and a half feet.

In addition to the main harbor, there is in the center of the city what is known as False Creek, with a dock line of about four miles, while the southern shore of English Bay to Point Grey extends an equal distance and is likely to be utilized in the not far distant future.

The Fraser River runs almost parallel with Burrard Inlet and English Bay from four to seven miles to the south, cutting off a peninsula about twenty-five miles in length. The river empties into the Gulf of Georgia by two main channels, enclosing several large islands. The City of New Westminster, on the north bank of the Fraser, is about twelve miles from the water front in the center of Vancouver. The two cities are rapidly growing toward each other and present developments indicate that within a comparatively short time the whole peninsula will be city and suburban property.

The river offers one hundred miles of deep water wharfage, all of which can easily be made available for shipping, a great part being suitable for the largest ocean-going vessels. The Canadian Northern Railway has announced that its chief terminus will be at Port Mann on the south bank of the Fraser, a little above New Westminster City. This will doubtless mean a considerable city at that point.

The advantages of a fresh water harbor and the high price of frontage on Burrard Inlet and False Creek are forcing industries to locate on the Fraser, and indications point to this as the great industrial center of the Province as Vancouver City will, of course, remain the commercial and shipping center.

The geographical and strategical position of Burrard Peninsula, as the chief port of the Dominion of Canada on the Pacific, assures for it a great future, and while it is at present the terminus and shipping port of the Canadian Pacific Railway system, it is expected that within four years the Canadian Northern, the Grand Trunk Pacific, the Great Northern, the Northern Pacific and the Chicago, Milwaukee & St. Paul lines will all have their steamers plying from the docks on Burrard Inlet, English Bay, or the Fraser River, while the completion of the Panama Canal on the one hand and the interim agricultural extension in Alberta and Saskatchewan, added to the development of British Columbia itself on the other, are all factors tending to increase her importance in the world's commercial intercourse.

Vancouver is rapidly becoming the great distributing center of the Coast. The growth of its wholesale business is demonstrated by the steady increase in the number of commercial travelers that are sent out of the city. Twenty-three years ago Vancouver was made a port of entry. It first became a distributing center in 1886, although it was not until ten years later that it gained any considerable recognition as a wholesaling depot. Now more than 800 commercial travelers are carrying samples out of Vancouver, and the wholesale houses have upwards of 5,000 employees on their payrolls.

It is important to realize the vast area and the absolute certainty of a rapidly increasing population in that portion of the Province watered by the Lower Fraser, which for practical purposes is called the Lower Mainland. From Lytton to the Coast on the North bank and from Chilliwack to the Delta on the South bank, there is a distance of one hundred and fifty miles of wonderfully fertile land, capable of providing occupation for hundreds of thousands of agriculturalists. New Westminster district contains 4,900,000 acres, of which one million or more are as good fruit and farm lands as can be found in the world. The climate, the character of the soil and the demands of the market will probably mean that the greater part of this area will be given over to fruit raising, market gardening and dairying. From the fact that an average of from fifteen to twenty-five acres of cultivated land in this district will keep a family in affluence, some idea of the future agricultural population may be formed.

PART III.

To Demonstrate That the Lower Mainland Is the Educational Centre of the Province.

1. Statistics taken from the report of the Department of Education for the year ending June 30th, 1909:

(a)	McGill University College (Vancouver) enrolled.....	108
	McGill University College (Victoria) enrolled.....	21
(b)	Vancouver High School enrolled.....	810
	Victoria High School enrolled.....	293
(c)	Vancouver Island High Schools enrolled.....	388
	Mainland High Schools enrolled.....	1,421
		1,809

Enrollment in High Schools on Lower Mainland.....1,045

(d) Percentage of High School students of British Columbia attending in—

Vancouver	45%
Victoria	16%
On Vancouver Island.....	21%
On Mainland	78%
On Lower Mainland.....	58%

(e) Total enrollment of British Columbia Public Schools

Schools	36,227
Total enrollment of Vancouver City.....	9,580—26%
Total enrollment of Peninsula between Burrard Inlet and Fraser, extending from Port Moody to Point Grey, together with North Vancouver	13,096—36%
Total enrollment of Lower Mainland.....	16,512—45.5%
Total enrollment of Victoria.....	3,395—9%

2. (a) Statistics obtained directly from Municipalities showing increase since last published report:

	Report of 1908-9.	Present.
Vancouver	9,580	10,600
North Vancouver	341	700
South Vancouver	1,103	1,500
Burnaby	286	410
New Westminster	1,593	2,000
Totals	12,903	15,200
Increase	2,307—18%	

- (b) Percentage of total number of pupils in Vancouver attending High School or College..... 10%
- (c) Number of pupils writing on McGill University Matriculation June, 1910, at—
 Vancouver150
 Lower Mainland200
- (d) Number doing University work in Lower Mainland—
 McGill University College125
 Columbian College 20
- (e) Number of students attending Columbian College, New Westminster188
 Number of students attending Westminster Hall, Vancouver 55
- (f) There are the following private institutions besides those already mentioned doing elementary and secondary work as high as matriculation: Chesterfield School, North Vancouver; New College, Vancouver City; Crofton House, Vancouver City (the largest girls' school in British Columbia); Yale Girls' School, Yale, B. C.; St. Ann's Academy, Vancouver City; St. Mary's School, Vancouver City; St. Louis' School, New Westminster; St. Anne's School, New Westminster.

3. Information regarding the Vancouver Schools indicating the general interest taken in educational matters.

Manual Training was established at Vancouver and Victoria through the generosity of Sir. Wm. Macdonald, three centres being established in each City. Since then no increase has taken place in equipment or staff in Victoria. Vancouver has eight centres in elementary schools and one in the High School, with a staff of eight instructors. New Westminster has also opened a Manual Training centre.

Domestic Science has been established in Vancouver and Victoria for some time. Victoria has one centre and one instructor; Vancouver has six centres with three instructors for cooking; two domestic art centres in High Schools with one instructor and a supervisor of sewing for the grades.

Vancouver has established night schools for elementary and advanced pupils; the enrollment last year was 900, of whom 600 finished the term.

Some years ago the Vancouver Board of School Trustees felt the need of medical inspection of Public Schools and took steps to carry out the work. At the time the work was started no other City in the Dominion had actually undertaken this in a systematic manner. The Vancouver Board now has a doctor giving his full time to the work, assisted by a nurse. The system adopted in Vancouver, after a careful inspection of the systems in American Cities, was so successful in operation that it was made the

basis of a Provincial Act providing for the medical inspection of all Public Schools in the Province.

The Board of Trustees of Vancouver, following the practice of most American Cities, has relieved the principals of the large elementary schools of actual responsibility of a class, thus enabling them to more carefully supervise the work of their school.

The compulsory clause of the B. C. School Act is enforced in the City of Vancouver, but not in any other part of the Province.

The citizens of Vancouver have always provided the funds for educational expansion in a most liberal manner. By-laws for school sites or school accommodation have never been defeated.

4. Students from British Columbia attending Eastern Universities:

	Lower Mainland.	Island.	Rest of Prov.
McGill Arts	8	6	5
McGill Science	8	2	5
McGill Medicine	15	6	10
Total	31	14	20
Queen's Arts	10	0	8
Queen's Science	4	0	2
Queen's Medicine	0	1	0
Total	14	1	10
Toronto University College...	12	3	5
Trinity College	3	0	0
Victoria College	2	1	4
Medicine	7	1	6
Science	5	4	2
Total	29	9	17
Manitoba College of Arts....	3	0	1
Medicine	1	0	0
Total	4	0	1
Lower Mainland			78
Island			24
Rest of Province			48
Total			150

5. The following statistics are quoted to show that the community in which a University is placed benefits far more thereby than any other part of the Province. Therefore, if placed in the largest community, the Provincial University extends its influence over the greatest number. It is a well-known fact that the larger American Universities draw half their attendance from their immediate environment. We aim to show that the same holds true in great measure for Canada also.

University of Toronto.

Total from Ontario, 3,387.

Total from Toronto, 1,285.

Ratio of attendance from Toronto to attendance from all Ontario, 38%.

Ratio of attendance from Toronto to attendance from Ontario outside of Toronto, 61.28%.

Grand total attendance at University, 3,934.

From Toronto, 1,287—32.7%.

McGill University.

Total number of students, deducting those taking special short courses for teachers and the students in Victoria and Vancouver 1,351

From Montreal, Montreal West and Westmount, 435 or 32.11%

In Arts, from Montreal, Montreal West and Westmount 43.81%

In Applied Science, from Montreal, Montreal West and Westmount 30.54%

In Medicine, from Montreal, Montreal West and Westmount 12.23%

In Law, from Montreal, Montreal West and Westmount. . 64.30%

The small percentage from Montreal who take Medicine in McGill is probably due to the commercial and industrial character of the City, and also probably to the fact that the Medical Department in Laval attracts many.

The following three examples are taken from American Universities:

University of Minnesota, Minneapolis.

Total attendance, 1,394.

From Minneapolis and St. Paul, 864 or 62%.

Minnesota is an excellent instance of a State where two large cities close to each other overshadow the rest of the State and furnish the larger proportion of the students to the University.

University of Washington, Seattle.

(a) Graduate School, 53.

From Seattle, 34.

(b) Total in all courses, except summer school, 1,679.

From Seattle, 828 or 49%.

University of Oregon.

(a) In Literature, Science and Arts and in Engineering (these departments are in Eugene), 612 students.

From Eugene 142 or 23.2%

From Portland 156 or 25.5%

In the School of Law (situated in Portland), 145.

From Eugene None

From Portland 116 or 80%

The depressing effect upon education caused by the removal of the University from a centre of population is strikingly noticeable in the University of Oregon. This University is situated in Eugene, a town of 12,000, at the head of the Willamette valley. The University has largely made the town. Yet it furnishes 142 of the students or 23.2%. Portland, the metropolis of the State, and the centre of the most populous area, furnishes only 156 students or 25.5%. The population of Portland is 200,000.

The University of Washington is in Seattle, a city of 250,000, and the City of Seattle has 693 students in the same departments as the 156 whom Portland sends to Eugene. Yet in law, where the school is in Portland, the City of Portland supplies 116 of 145 or 80%. In the Department of Law in the University of Washington, Seattle supplies 67 students out of 162.

From these comparisons it may be seen that in Portland, owing to the absence of the other faculties, an excessive number of students are being forced into law. It is also clear that if all the faculties were near Portland that City would make as good a relative showing in all courses as does the City of Seattle in the University of Washington.

The totals also are noticeable. In Literature, Arts and Science, Engineering and Law, the University of Oregon has 757 students. In the same departments the University of Washington has 1,679. There is no room for question that in the State of Oregon hundreds of young people are going without University education because of the unfortunate, though beautiful, site of the University.

If further evidence is sought of the effect upon the higher education of a city by the presence of a University, the cities of Hamilton and Kingston may be compared.

Hamilton has a population of 70,000.

Kingston has a population of 20,000.

Kingston sends to Queen's University 207 students. The number of students from Hamilton in the faculties of Medicine and Education at Toronto is not at hand. Otherwise students from Hamilton number as follows:

At McGill, 12; at Queen's, 13; at Toronto (not including Medicine and Education), 60. Total in McGill, Queen's and Toronto (excluding students in Medicine and Education at Toronto), 85.

The total number of students from Hamilton taking University courses is then a trifle over one hundred, just half the number from Kingston attending Queen's alone.

Clearly the more distant a community is from the University the greater the difficulty in getting University education. Then in no way could hardship be imposed upon a greater number than by placing the University of British Columbia away from the LOWER MAINLAND.

6. The attitude of the people of the Lower Mainland toward higher education is shown by the support given the following institutions:

(a) McGill University College of British Columbia.

In 1894, at the instance of friends of higher education in the Province, who desired such relations between local high schools and universities in other parts of the Empire as would tend to the inception and promotion of university work in British Columbia, legislation was passed which empowered the affiliation of high schools to recognized universities; and this was supplemented in 1896 by an act providing for the incorporation of high schools as colleges in accordance with the charters and constitutions of such universities. Under these enactments Vancouver High School became Vancouver College, and was admitted to affiliation for the First Year in Arts by the Corporation of McGill University, which had in the meantime secured such extension of its charter powers as made possible the admission of extra-Provincial colleges to the relation of affiliation. Work was begun under this relation in 1899, and by 1902 the work had grown so, and was of such a character that an extension of affiliation was granted, to cover the first two years in Arts and the University Intermediate Examination. This year Victoria College, too, applied for and obtained affiliation covering the First Year in Arts. Later the need of university connection more intimate still and essential than that of affiliation and also of extension of the scope of work came to be felt and urged, and the result of much careful urging and deliberation was the passage in 1906 of local legislation (1) enacting that "the Governors, Principal, and Fellows of McGill College and University may exercise and enjoy in the Province of British Columbia all the powers, rights, privileges, and functions conferred upon them by the charter granted to them by His late Majesty, King George IV., in the second year of his reign, and amended by Her late Majesty, Queen Victoria, in the sixteenth year of her reign"; and (2) authorizing the incorporation of a body politic under the name of "The Royal Institution for the Advancement of Learning of British Columbia, whereby the Royal Institution shall undertake the conduct or administration of any part of the higher education work now carried on by such Boards," and also to "establish at such place in British Columbia as McGill University may designate a College for the higher education of men and women, such College, in respect of courses of study and examinations, to be deemed a College of McGill University, and the instruction given to its students to be of the same standard as that given in like subjects at McGill University at Montreal."

In pursuance of the objects of its foundation, therefore, the Royal Institution established in 1906, at Vancouver, the McGill

University College of British Columbia (by agreement with the Board of School Trustees) taking over the Arts work previously done by the Vancouver College, with extension of the scope and of the options allowed, adding two years of Applied Science, and in 1908 the Third Year in Arts.

In 1907 the act was amended so as to allow of the establishment of Colleges of the Royal Institution in other cities in the Province, and in the following year the College at Victoria, hitherto directly affiliated to McGill, came under the control of the Royal Institution as a part of the McGill University College of British Columbia, affording courses in the first two years in Arts.

Annual expenditure	\$21,000
Revenue—Fees	\$ 2,500
Endowment subscription	3,075
Vancouver Council	5,000
Vancouver School Board	10,425
	\$21,000

There is a building fund of \$100,000 (half from citizens in Vancouver City and half from an Eastern subscriber). This fund was raised before the University Site Commission was appointed and action is postponed pending decision as to the time of commencing work on the Provincial University.

(b) Westminster Hall (Presbyterian Theological College).

The site and premises represent investment of.....	\$24,000
Two libraries, with endowment of	5,000
Archibald library, value	1,120
Vipond library endowed annually with	200
Value	500
Furnishings	3,000
Budget for 1908-09	10,100
Budget for 1909-10	14,100
Budget for 1910-11	17,000
Endowment fund at present	175,000

(All from Lower Mainland.)

Total students, 55.

Support from Lower Mainland, 75%.

Remainder from the Church as a whole.

Extract from statement made before University Commission:

Questioned: In the event of the University site being located on Vancouver Island, would it cause the removal of Westminster Hall to that point?

Answer: I am not authorised by the Directorate of the Hall to make any statement in this respect, but I am in a position to say that the General Assembly of the Presbyterian Church

decided that its present location was the proper one for our college, and our experience since its establishment has so fully demonstrated that the work can be more successfully carried on here than at any other point in the Province; that any consideration as to its removal to another location, no matter where the University may be planted, will never be contemplated.

G. F. GIBSON,

Chairman Board of Directors, Westminster Hall.

(c) Columbian Methodist College (at New Westminster).

The average annual attendance for the past four years is 188, and it may be safely estimated that 50% of these are looking forward to a University course. The annual budget is \$20,000. This income is derived as follows:

Annual maintenance subscription	\$ 3,500
General Church funds	1,000
From students	15,000

This is the estimated expenditure as well as income, although it does not include the private expenditure of students which would probably add some thousands of dollars, and it does not include money spent for additional buildings. The present value of the college property is moderately estimated at \$85,000. There has just been raised a General Endowment fund of \$105,000, of which \$100,000 is secured from the Lower Mainland. The college derives 90% of its students and 75% of its financial assistance from the Lower Mainland. While the policy of the Methodist Church is to associate its work with the Provincial University wherever such may be placed, it can easily be perceived that a site within a reasonable distance from its present plant would enable it to make a larger investment in a federated university than would be the case were it called upon to entirely surrender its present work.

Principal Sipprell, in an extended report to the Commissioners, outlined the history, present work and future policy of the college, and in conclusion said:

"In consideration of the facts we have now set forth before your honorable body, we crave your consideration of the following matters concerning Columbian College and its relation to the selection of the site of the proposed Provincial University:

"1. Columbian College has been carrying on University work in Arts and Engineering for several years in affiliation with the University of Toronto.

"2. It has demonstrated its ability to do efficient University work in the fact that it has produced five graduates in Arts in Toronto University and that it is having continued success in its examinations from year to year.

"3. Its work of the years has forced upon it an expenditure of money in lands, buildings and equipment, which renders its present position one of more or less permanency for the future.

"4. Its work has been one wherein it has borne burdens without any aid whatever from the state, and in which it has not asked for or received any special Provincial consideration.

"5. To remove from its present location any part of its work would mean serious financial loss, while to retain its present location and carry on its work with the University near at hand would result in the following important advantages:

"(a) It would preserve the College from serious financial loss.

"(b) It would leave its finances greater for the expansion of its present work as a College.

"(c) It would preserve its integrity as an institution in making financial appeals to the Methodist Church.

"(d) It would prevent the duplication of instructors, buildings, etc.

"(e) It would preserve the integrity of its student body and its present associations, which are the fruit of years of effort.

"(f) It would be a recognition of the efforts of the years in the interest of higher education which have been made by the institution with all the difficulties with which it has had to contend.

"(g) It would allow of the carrying on of the mission work of the Theological College with a moderate expense, which otherwise would be impossible.

"(h) It would allow of instruction in special University classes for a growing number of students in our Ladies' College and in other departments of our work who are not able and who do not desire to pursue a full University course.

"(i) It might allow of interchange of work between the Professors of the Provincial University and of Columbian College, which would reduce the expense of the University to some considerable extent.

"We submit this report believing it to be in the interests of education in British Columbia. We desire to contribute, so far as possible, to the success of the proposed Provincial University. We hope that conditions will be such as will make it possible for us to work in the closest possible relations with the proposed University, and while we feel sure that the decision of your honorable body will be in the general interests of the Province, we trust that, if possible, with those interests in view, the work that the Columbian College has done during the years may be given due consideration."

(d) The Provincial Normal School (Located in Vancouver).

The attendance of students at the present session is 95.

From Lower Mainland	61
From Vancouver Island	22
From rest of Province	12

The faculty of education in the Provincial University, when such faculty is established, will be greatly benefited if the Provincial Normal School and the Model School are easily accessible to the students of the University.

(e) The Rev. Father Welch, O. M. I., Superior of the Church of Our Lady of the Holy Rosary, said that he fully agreed with those who were convinced, and he felt conscientiously convinced, that the most suitable site for the proposed new University was Vancouver, or its immediate vicinity. Many arguments in favor of this conviction had already been given. With the permission of the Commissioners he would add one more.

It should be remembered that the Catholic Ecclesiastical Province of Western Canada comprised the whole of British Columbia, together with the Yukon. When this Ecclesiastical Province was formed Victoria was named the metropolitan or archiepiscopal See. The Archbishop resided in Victoria. Quite recently, however, the Holy Father, Pope Pius X., had transferred the archiepiscopal See from Victoria to Vancouver. In the Papal Brief the reasons given for this important change were Vancouver's growing size and importance and greater facility of approach.

Rome has had a long experience in these matters and seldom makes a mistake, and he felt assured that if she were consulted by this University Commission she would cast her vote in favor of the Lower Mainland.

(f) The Ven. Archdeacon Pentreath briefly addressed the Commissioners in the matter of the proposed Anglican College, for which a considerable endowment fund has already been raised. While it has been decided to build the College in connection with the Provincial University, he, personally, felt success is very doubtful if this means a location other than on the Lower Mainland.

(g) The development of these institutions shows that in this section alone has the need of higher education in the Province been recognized and met. We do not claim that the University should be placed here simply because of the presence of these institutions. Nevertheless their existence and welfare does constitute a kind of moral claim, and moreover they show that in the Lower Mainland there exists a generous interest in higher education that would go far towards making the success of the new University.

PART IV.

1.—Accessibility.

The University should be placed where it will be most accessible to the present and future population of the Province and where the attention and interest of the people are most strongly directed. We have failed to find an educationalist of note who advocates placing a State University in a rural grove or quiet, inaccessible town where it would be attended mainly by sons of the well-to-do who would go to college in any case. The consensus of opinion favors a location not further than fifteen miles from the metropolis, if the latter is easily accessible to the whole population. There is no question that the Lower Mainland is by far the most accessible locality in British Columbia. Every railroad of the Province will shortly have terminals here; the American transcontinentals are working this way, and every indication points to this as the greatest railway centre of the West. Since the steamship traffic of the Province centres here, the University, if located here, would be most convenient and familiar to the population of the coast districts, with the possible exception of the west coast of Vancouver Island.

It has been shown above that, at the very least, one-half the population of the Province is resident in this district, and that this portion will most probably be maintained, because of railroad and steamship activities, manufacturing conveniences and the intensive farming of the Fraser Valley. Suitable, or even ideal urban, suburban and rural sites, for the University are available within this locality, and tramway development is already such that several of them are already within daily reach of practically the whole of this part of the population. This alone would seem to us a sufficient argument in favor of our contention. It is doubtful if such an opportunity of bringing the University to the doors of the people it will serve has been offered before in the history of Canada.

2.—Climate and Scenery.

It is doubtless of advantage that the University should be situated in a locality where the climatic conditions are conducive to the good health of the students. The climatic conditions of the Lower Mainland are most favorable in this respect. It may be that the upper country is more suitable for people with throat and lung troubles, but such form a very small minority of college students. Our climate is so equable that it permits of outdoor exercise under fairly pleasant conditions during the whole year. The absence of extremes may be gathered from the fact that we have annually not more than fifty days with a temperature above 70°, at least two hundred and fifty registering above

50°, and usually two or three weeks of very moderately cold weather. The cold, cutting winds that sweep up the Straits of Juan de Fuca do not touch this district. Our schools and colleges have never found it necessary to alter any program of outdoor events for either men or women on account of rainfall during the winter months, while our summer weather is admittedly the finest in the Province. Moreover, while the rainfall in some parts of the interior and the southern portion of Vancouver Island is insufficient for agricultural purposes and the providing of a good water supply, the Lower Mainland never suffers in this respect. The purity of the water supplied to the cities of Vancouver and New Westminster and the surrounding municipalities is unrivalled in Canada.

Since the climate of the Lower Mainland has been somewhat misrepresented, we are led to quote the following statistics for 1909 from the two meteorological stations of Victoria and Vancouver:

Victoria—Precipitation, 27.98 inches; mean relative humidity, 80; mean velocity of wind, 10.65; sunshine, 1944 hours.

Vancouver—Precipitation, 58.54 inches; mean relative humidity, 77; mean velocity of wind, 4.31; sunshine, 1879 hours.

The advantages derived from a University site surrounded by pleasant scenery are not essential, but are important, and should not be neglected. No location could be imagined presenting grander scenic features than the Lower Mainland. The background of the mountains to the North and East, the river scenery along the Fraser Valley, the wonderful fiords of Burrard Inlet and Howe Sound, the primeval forest of Stanley Park, the Capilano, Lynn and Seymour canyons, with the more peaceful agricultural scenery of the farm lands in the rural districts, furnish a panorama unsurpassed for natural beauty and grandeur.

3. The advantages offered by the vicinity of a large and active centre of population to the members of a University Faculty are beyond dispute. In this connection we will quote from Mr. Edwin E. Slosson, Ph. D., in "The Independent" of February 3, 1910:

"The more highly specialized the work of the University and the more closely it is connected with the work of the world, the more necessary are the urban facilities. The medical men need hospitals and sanitary establishments. The students in architecture, art and music require museums and operas. Lawyers, economists, sociologists, all who are studying that branch of zoology dealing with the habits of the political animal, seek the localities where they find the greatest abundance of specimens. It is easier in the cities to get men of eminence in the several professions to devote at least a part of their time to academic duties. An engineer who is good for anything can make more than his

salary by utilizing odd hours and vacations. His literary colleague finds it advantageous to be in close touch with editors and publishers. Still more important, perhaps, is the opportunity of association with men who are concerned with art, letters and science in other than a pedagogical way. In a small college town a professor finds his cultured associates almost exclusively in the Faculty clique, and they, being absorbed in diverse lines of study, have nothing in common to talk about except shop. Naturally he comes to think that all the world's a school and all the men and women merely teachers."

The Lower Mainland is the only district in British Columbia that can offer these urban facilities, which are almost indispensable.

The General and Special Advantages Offered to the University by the Lower Mainland.

4. General advantages to students.
 - (a) Many students in modern Universities must earn their way in whole or in part. It is evident that opportunities for doing so are correspondingly numerous in the large city. Cornell was founded as a poor man's University, and fees were made low and scholarships generous with this end in view; but Ithaca is a small town, and it is well known that for this reason alone it has been impossible to realize the ideals of the founder. Some consider it more desirable to have a student leave home to attend college, but in a great many cases this is impossible because of financial reasons. A State University should be placed where it will make a college course possible to the greatest number. Finally, we are not prepared to admit that living would be cheaper in any other part of the Province, books and clothing are certainly not dearer than elsewhere, and the price of board will probably be regulated by the college dormitories.
 - (b) A great deal is sometimes made of the supposed moral disadvantages of a large city. However, no one acquainted with the West would claim that our smaller towns are morally cleaner or better governed than the cities of New Westminster and Vancouver. Opportunities of dissipation will be brought to the neighborhood of the large University, wherever it is located. No one claims that there is less dissipation or any higher moral tone among the students of the Universities of Stanford and Oregon than those of California and Washington. The world no longer acts as though it believes that there is something so morally weakening in a college course that it is necessary to take col-

lege men and women away from the surroundings of their later lives with the quaint idea of removing them from temptation.

- (c) It is often claimed that the distractions of a large city are such that studies are neglected. Surely, however, the amount of work done by students allowed to remain at the University is under the control of the Faculty, and why should a college student living five or ten miles away not study as well as High School students living in the heart of the city? The educative influence of a large city is no longer overshadowed by these supposed distractions and temptations.
- (d) The Lower Mainland has a manifest advantage in two lines of University activity, namely, in a large population to be served by evening classes, and in the possibility of lectures being given by prominent men outside the regular staff.

5. Special advantages in the studies of Art and Pure Sciences.

- (a) The literary subjects of the Arts course can, on the whole, be studied as well in one place as another. The University library is by far the greatest storehouse of material in these branches, and for the rest the public libraries of this great centre will ultimately be even as valuable as that of the Legislature at the Capital. The same may be said of some of the pure sciences whose workshops are the laboratories and museums, but it is essential that actual conditions should be met in the study of such branches as sociology and economics, geology and biology. In these, we claim, the Lower Mainland possesses peculiar advantages.
- (b) Sociology and Economics. The study of banks and exchanges, the administration of charity, the conditions of labor in factories and stores, the study of the insane and criminal classes as illustrated in the asylums and jails, all depend for their success on the colleges being in or near a large town. Moreover, since this is to be one of the most cosmopolitan centres of population of the world, and the relations of the white and yellow races, both locally and across the Pacific, will in very few cities present such problems as in ours, and we claim that students should be allowed to study the resulting conditions and our attempts at their solution in the place where the work is done. We need not do more than mention that the new and rapidly growing University departments of Commerce and Transportation can not be satisfactorily developed elsewhere in this Province.

- (c) **Geology.** The Lower Mainland of British Columbia includes within its boundaries formations dating from the Palaeozoic to the Modern, composed of rocks of every type of deposition, plutonic, eruptive, water sedimentaries and glacial deposits, and exhibiting many of the structures typical of each class of terrane. Within fifty miles of Vancouver itself the student may observe the action of glaciers, of rivers in delta formation and erosion, in fact all forms of epigene action, and may see a great variety of ore and coal deposits, with several mines in operation on both coal and metallic deposits, the latter including iron, copper, gold and silver ores. For details we would refer to the Geological Survey Reports, especially No. 996, on a portion of the coast of British Columbia and adjacent islands, by O. E. LeRoy (1908).

The principal metal mines in operation in the district are as follows:

- (1) The Britannia Mine, on Howe Sound, about forty miles by water from Vancouver.
- (2) The Empress Mine, near the Britannia.
- (3) The Bonanza Mine, on Bowen Island.
- (4) The Surprise.
- (5) The Silver Tip.
- (6) The Golden Slipper.
- (7) The Texada.
- (8) The Paxton.
- (9) The Lake.

Copper Mines on
Texada Island.

The Red Cloud, Marble Bay, Cooper Queen, Cornell, Little Billy and Loyal Mines are also producing mines, some of them of large size, on Texada Island.

The coal mines at Nanaimo and Ladysmith, some four or five in number, afford an excellent opportunity for the study of this department of Engineering work.

- (d) **Zoology.** With reference to the animal life, it may be said that a very interesting land fauna is observable in nearly all parts of British Columbia. Of these the larger species are not easily observable by students in classes, and are best studied from museum specimens. The marine fauna of the coast is one of the richest to be found within the limits of the temperate zones, having a many times larger number of species than are found on the Atlantic coast of Canada, and a considerably greater number of genera, and orders. There are even some classes, such as sponges, very well represented, which have little or no foothold along the eastern littoral.

The Biological Station established by the Dominion Government at Departure Bay is designed to furnish facilities for students. It is only forty miles distant from Vancouver, and is situated in one of the best localities for collecting on the Coast.

The first of a series of valuable faunal studies conducted at the Biological Station is now in press.

- (e) Botany. Six flora represented in British Columbia depending upon (1) temperature, as determined by altitude, and (2) humidity, or aridity. These six floral zones are:

(a)—Boreal.

- (1) Arctic of Arctic Alpine.
- (2) Hudsonian.
- (3) Canadian.

(b)—Austral.

- (4) Arid Transition.
- (5) Humid Transition, or Pacific Red Fir.
- (6) Upper Sonoran, Sagebrush Area.

The Upper Sonoran corresponds agriculturally with the practical raising of Peaches, and is confined to the southern part of the Okanagan Valley. The Humid Transition includes the great moist forests of the Pacific Slope, characterized by such trees as Red Fir, Giant Cedar, Red Alder, Oregon Maple, the characteristic flora of the coast region at low altitudes, and the most important and varied floral region of the Province.

The Arid Transition Zone includes two types, (a) bunch grass prairies, and (2) the yellow pine forests, mainly represented in any belt of the interior of the Province or upper country.

The Canadian Zone, which is found at elevations of from 1400 to 5000 feet altitude, is characterized by such trees as the Western White Pine, Lodge Pole Pine, Western Larch and Western Hemlock.

The Hudsonian Zone extends up to tree-line on the mountains, beginning at about 5000 feet or less in southern British Columbia, and includes the Alaskan Cedar, the Sub-Alpine Fir, the Black Hemlock and the White Bark Pine.

The Arctic Zone consists of those plants which flourish in the Alplands between timber line and the edge of the permanent snows.

As we proceed northward in the Province the altitudes at which these various zones of vegetation are found decreases, so that the Upper Sonoran and Tran-

sition Zones disappear and are replaced at sea level by the Canadian, and the Hudsonian and Arctic become correspondingly more prominent and nearer the sea level.

It follows that the greatest variety of plants for study within the limits of any one district must occur in the southern parts of the Province, in parts where there are mountains extending above timber line. This condition is met most fully by the southern mainland in the coast regions, where four of the six floras are to be found, namely, (1) the Humid Transition, (2) the Canadian, (3) the Hudsonian, and (4) the Arctic. Of the remaining two zones, the Upper Sonoran occupies only a small area in the Province, and some features at least of the Arid Transition area are to be found along the east coast of Vancouver Island in the vicinity of Nanaimo.

The Humid Transition or characteristic coast flora includes three types, (a) the forest type, (b) the prairie type, (c) the bottom land type. Of these, the first is the most prominent and is found everywhere on moderately high ground with good soil. The bottom land type is especially well developed on the flood plains and delta of the Fraser River, including the Chilliwack and Sumas prairies, the Pitt River meadows and the Delta.

Besides the regular zonal floras described above, the coast district presents a sphagnum (bog flora) on the islands of the Fraser delta, a salt marsh flora, and a very interesting marine flora in the waters of the Gulf of Georgia.

6. General advantages for professional schools.
 - (a) The Faculties of the Professional Schools must be composed of eminent doctors, lawyers and engineers. Under modern conditions these must practice their profession outside of their regular work as college professors. No other locality in British Columbia gives any promise of ever offering sufficient inducements to such men.
 - (b) The Faculties must be in touch with professional and technical work in order to keep pace with the advancement in their own lines. That is, they must be able to study at first hand the work that is done and be able to associate privately and in societies with leading men of their profession.
 - (c) The equipment and resources of the modern professional and technical world are being placed more and more at the disposal of the colleges for study and

experimentation. This means greater opportunities for Faculty and students, and actual donations of equipment for the making of tests and the gathering of information. This work can be done only in colleges which are in touch with the headquarters of professional and technical activity. It goes without saying that the Lower Mainland is and must always be this headquarters for British Columbia.

- (d) Students must be given an opportunity of examining the best practical work that is being done in their own department. If this is not possible in the city in which their college is placed long trips must be taken. For example, students of Toronto and Queen's visit the power plants at Niagara Falls, and the mining students of McGill have to make annual trips as far as Sydney, C. B., and British Columbia. We speak advisedly when we claim there is probably no University in the world more favorably situated in this respect than our Provincial University would be if placed on the Lower Mainland.
- (e) It is very desirable that students should have the greatest possible opportunity for becoming acquainted with men in practical work in their own department, that their college situation should be of the greatest advantage to them in securing employment in their own lines during the vacation, and, finally, that they should become familiar with the actual conditions of their work after graduation.

7. In regard to the special case of the Medical College, we incorporate the report of a sub-committee of medical men who have thoroughly investigated the conditions:

"In commencing our report we would say that the Medical Profession of the Lower Mainland is far from being a unit in favor of the establishment of a Medical College, nor do we think that the time is yet necessarily ripe. But it is evident that at some time in the future the question must arise, and that it is intimately bound up with the location of the University. Your Committee finds unanimously and without hesitation that Vancouver is the only place in the Province at all suitable for the location of a Medical College.

"In support of our position we would point out that Vancouver is and will be the centre of the most populous district of the Province. In consequence of this it follows that injury and disease are present in greater quantity and variety than elsewhere. This aggregation of 'ills of the flesh', constituting, in technical language, 'clinical material', lies at the very foundations of all successful medical teaching.

"In order to accommodate the sick and the injured, and at

the same time to make the cases available for study and teaching, large, well-equipped and modern hospital accomodation is necessary. We give in detail the capacity of Vancouver and New Westminster in this respect:

"The Vancouver General Hospital, with 350 beds when completed.

"St. Paul's Hospital, with 250 beds when completed.

"St. Luke's Hospital, with 30 beds.

"Royal Columbian Hospital, New Westminster, with its contemplated maximum of 180 beds.

"The Public Hospital for the Insane, New Westminster, with accommodation for 550 patients.

"Private institutions, mainly in Vancouver, with an aggregate of 200 beds.

"Large centres of population and large hospitals require the services of a numerous body of medical men, among whom will probably be found many of very considerable capacity, attracted there by the wealth of opportunity. In the event of the founding of a Medical College near such centre of population its Faculty would be largely drawn from the surrounding practitioners. In Vancouver and New Westminster some 150 medical men are available, which number is constantly increasing. In passing, your Committee desires to draw attention to the existence of the Vancouver Medical Association, which for the past twelve years has been doing excellent work in Sciences, as well as in other fields of medical interest. The Society has a membership of 120, possesses a library of over 2000 volumes housed in rooms of its own, employs a Librarian, and acts generally as the centre of the medical life of the community. We instance this as showing that the habit of and capacity for organized work is here.

"We would also point out that, through the kindness of friends in Great Britain, influential members of the Royal Society, our Association has been offered a considerable collection of scientific works of a general character, hardly suitable for a specialized Medical Library, but of very great value in that of a general University.

"The situation of Vancouver as a port with a large and increasing sea-borne traffic, reaching our shores from many tropical and sub-tropical climates, brings before the medical men of this city many of the rarer forms of disease. This, of course, is of inestimable benefit to both teacher and taught, and might in time lead to the special study of these affections here.

"Anatomy can only be taught in large centres of population where the necessary requirements can be obtained, and this particular science is as essential to the doctor today as ever it was.

"Our contention is further strengthened by the necessity for placing a Medical College where it can be used by the greatest number at the least expense. It is obvious that large cities will

supply a greater proportion of students than more thinly settled districts, and, moreover, those coming from outside can be more easily accommodated and have the benefit of educational facilities along other lines brought within their reach.

"Finally, your Committee would point out the necessity of having the Medical College situated reasonably near the University (presuming the University to be a teaching body). Much of the earlier work in medicine, such as Chemistry, Botany, Zoology, Embryology, etc., may be taken more advantageously and more economically in conjunction with the general scientific course of a University than if taught by separate professors in a Medical College. Generally speaking, men teaching special subjects of this sort have had special training, are brought from outside and command good salaries. It is therefore desirable that their work should carry over as wide an area as possible.

"The summing up of our position is this: The only possible location for a Medical College is on the Lower Mainland. For the earlier years of the course a position contiguous to the scientific teaching of the University is a necessity for the best and most economical results, and it is desirable to break up the course by taking the final years in a distant city. This brings our support to the location of the University as near as possible to the centre of population on the Lower Mainland.

"The following list of the twenty most important Medical Schools in the United States shows that they are practically all in large cities and departments of great Universities:

Schools of Medicine of the United States.

No.	Apart from any University	Attendance	A Department of some University Department of Medicine at—	Attendance
1.	.....	.....	University of Louisville.....	475
2.	Jefferson Medical College	586	.....	.....
3.	.....	.....	University of Chicago.....	562
4.	.....	.....	University of Pennsylvania.....	559
5.	.....	.....	Northwestern University.....	537
6.	.....	.....	University of Illinois.....	476
7.	.....	.....	Tulane University of Louisiana	475
8.	Medico-Chirurgical College	461	.....	.....
9.	.....	.....	Medical College.....	445
10.	Memphis Hospital Medical College	442	.....	.....
11.	.....	.....	Valparaiso University.....	383
12.	.....	.....	University of Michigan.....	378
13.	.....	.....	Tufts College.....	359
14.	.....	.....	Columbia University.....	345
15.	.....	.....	Johns-Hopkins University.....	344
16.	.....	.....	University of Pittsburg.....	340
17.	Long Island College Hos- pital	335	.....	.....
18.	.....	.....	University of Maryland.....	329
19.	.....	.....	St. Louis University.....	322
20.	Baltimore Medical College	307	.....	.....

"J. M. PEARSON, M. D.,

"Chairman Committee on Medical College."

8.—The Case of the Law School.

Purely academic study of law has always been found inadequate. Very few Law Societies—and with good reason—will at once admit a man to the Bar, even though graduated in law from some University. The combination of office experience and academic course of study is, in the estimation of the Legal Profession, the best form of legal education. The facilities for a fully equipped office experience are to be found with greater certainty and in greater numbers in large than in small centres of population—in fact, they may be considered to vary in these respects directly with the population.

On the Lower Mainland there are 51 law firms, comprising 185 lawyers, while on Vancouver Island there are only 41 law firms, comprising 65 lawyers.

There are 81 law students in the whole of the Province of British Columbia, of which number 53 reside and study in Vancouver, while 4 reside and study in New Westminster.

There remains further the greater possibilities for obtaining skilled lectures, such as leading Counsel of the Province, in a large than in a small centre of population, a most important item to any institution.

From a material point of view the fact cannot be disregarded that it is highly advantageous to the student at law to become acquainted where the greatest opportunities for the future lie. That the prospects of success are most numerous in the largest city of the Province is scarcely open to question.

Finally, on the side of the Bar, it may be urged that the presence of the Law School elsewhere than in the largest centre of population would deprive by far the greater portion of the Legal Profession in the Province of British Columbia of the services of students and entail great confusion and increased expense in connection with office work.

In addition to being located in a large centre of population, it is highly expedient that the Law School of the Province should be located in the same place as the other departments of the Provincial University, particularly the Faculty of Arts. With both Law and Arts Faculties located in the same city it will be possible for those intending to enter the Legal Profession more easily to combine a Law and Arts course of study—by no means an inconsiderable boon to the student at law. Nor are the advantages to be derived from such a unity entirely on one side; it can not be but an advantage to students of Arts to study some of the broader studies which are included in every Law Curriculum, such as Constitutional Law, Roman Law, International Law and Legal History. There remain still the athletic advantages to be derived by the law students from contact with the University.

In the United States, out of the thirty largest Law

Schools all but six are departments of the greater Universities, and these six are all situated in large cities.

Finally, steps have already been taken by the Barristers and Students at Law of British Columbia towards establishing a Law School in Vancouver, and from time to time leading Counsel of the city have voluntarily delivered occasional lectures to the student body in this city. That the nature of the work of the Legal Profession and students along these lines may be more fully comprehended, a copy of the Petition to the Benchers in this behalf has been appended to this treatise.

To the Benchers of the Law Society of British Columbia:

"PETITION of the Students-at-Law and Articled Clerks of British Columbia to the Benchers of the Law Society of British Columbia:

"Gentlemen—The Petition of the undersigned Students-at-Law and Articled Clerks humbly sheweth—

"1. That there are 74 Students-at-Law and Articled Clerks now in the Province of British Columbia, of which 54 reside and study in the Cities of Vancouver and New Westminster, and of this number 50 reside and study in Vancouver.

"2. That the Vancouver Law Students' Society, composed of the Students-at-Law and Articled Clerks of Vancouver and New Westminster has put itself on record as being in favor of petitioning your honorable selves for the establishment of a Law School in the City of Vancouver.

"3. That according to a statement issued by the Secretary of the Law Society the Students-at-Law and Articled Clerks of this Province between the 31st of January, 1908, and the 31st of January, 1909, paid into the Law Society of British Columbia as fees for preliminary and intermediate examinations \$1440, as fees for calls and admission \$3600, making a total of \$5040.

"4. That there is now no provision in the Province of British Columbia for the giving of lectures on legal subjects to law students.

"5. That your petitioners are desirous of having a Law School established by the Law Society of British Columbia in the City of Vancouver, having a resident Dean who would act as Registrar in addition to arranging a schedule of lectures.

"6. That the Law Society will make such adequate appropriation for the salary of the Dean and towards the remuneration of the lecturers as circumstances shall warrant.

"7. That under the auspices of the Law School at least six lecturers should be secured, to be suitably remunerated out of the funds of the Law Society, and that the students should be afforded at least three lectures per week for a period of six months in the year on subjects included in the curriculum of the Law Society for intermediate and final examination.

"8. That such lectures should be made compulsory on Students-at-Law and Articled Clerks residing in Vancouver by such measure as the Law Society may approve.

"Signed by all the Law Students on the Mainland of British Columbia."

The Law Students in Victoria refused to sign because they felt that the location of the Law School in Vancouver would prejudice the authorities in favor of locating the Provincial University there also.

"To the Benchers of the Law Society of British Columbia:

"Gentlemen—We, the undersigned Barristers and Solicitors of the Province of British Columbia, have been informed of the Petition to the Benchers of the Law Society by the Students-at-Law and Articled Clerks asking that a properly organized Law School be established for the better instruction of the students, and are of the opinion that such an institution would be of material benefit to them in their preparation and training for the Legal Profession, and trust that the Benchers will favorably consider the petition of the said students.

Signed by all the Barristers and Solicitors of British Columbia to whom it was possible to present the petition, with the exception of 4 out of the 45 in Victoria—that is to say, 166 practitioners.

Dated March, 1909.

Law Schools of the United States.

No.	Apart from any University	Attendance	A Department of some University Law Departments of—	Attendance
1.	New York Law School.....	1050	.....	.....
2.			University of Michigan.....	856
3.			New York University.....	742
4.			Harvard University.....	680
5.			Yale University.....	650
6.			University of Minnesota.....	602
7.			Georgetown University.....	525
8.	Chicago-Kent Law College.....	470	.....	.....
9.			University of Texas.....	388
10.			George Washington University.....	337
11.			Columbia University.....	330
12.			University of Pennsylvania.....	327
13.			Northwestern University.....	322
14.	Illinois Law College.....	311	.....	.....
15.			University of Chicago.....	303
16.			University of Virginia.....	290
17.			Boston University.....	285
18.	Boston Y. M. C. A. Law School.....	276	.....	.....
19.			University of Missouri.....	274
20.			St. Lawrence University.....	274

9.—The Colleges of Applied Science.

- (a) **The School of Mines.** Within easy distance for a Saturday's trip we have the great copper and gold mines of the Britannia Company, on Howe Sound; the immense iron deposits, as well as the copper and gold mines of Texada and the other islands of the Gulf of Georgia; the coal mines of Nanaimo, as well as ore deposits now being developed in various localities such as those at the head of the Lynn and Seymour canyons. Various great smelters could be visited on the same trips. This is the headquarters for the distribution of mining and smelting equipment of the Province, as well as for the commercial and government assaying. As we have shown in Part 5 of this section, practically every geological formation in the Province can readily be studied here. It is very doubtful if a better combination of natural advantages for the study of mining could be offered by even our famous mining district in the Boundary Country.
- (b) **Electrical Engineering.** The power plants of the British Columbia Electric at Lake Buntzen and Coquitlam, and that of the Stave Lake Power Company, are said to present as great a variety of problems of the generation of electrical power as any other plants in the world. It is estimated that there are capable of being developed within reach of the Cities of New Westminster and Vancouver at least 300,000 horse power, of which the two plants just mentioned represent 100,000. This is the headquarters for British Columbia of the great electrical manufacturing firms. We have found in our Applied Science work in McGill College, in the City of Vancouver, that the representatives of these firms are most willing, as a matter of business policy, to make equipment and data available for the use of college men. All the problems of electrical transmission and power consumption are splendidly illustrated in this locality.
- (c) **Civil and Mechanical Engineering.** For the next generation, at the very least, the Lower Mainland of British Columbia will be a veritable cosmos of manufacturing and constructive engineering. To show that this is a reasonable statement we need only mention—

Railway and steamship terminal facilities for the Grand Trunk Pacific, Canadian Northern, Great Northern, Canadian Pacific and British Columbia Electric railways.

Harbor improvements and docks on Burrard Inlet,

the North Arm and Main Channel of the Fraser River, and more especially the gigantic reclamation projects of False Creek.

Railway and city bridges over all the above-mentioned waters.

The grading, sewage and water supply problems for a rapidly growing metropolis.

Under modern conditions of technical education such an industrial city can not long remain without a technical College.

10.—The Agricultural College.

The best American thought favors a development of the Agricultural College as a department of the University work, as distinguished from the agricultural trade schools for the training of farmers. The work of the College should be the training of teachers of agriculture and men capable of experimentation, and not farmers, as the Engineering School is not called upon to train the mechanics in our factories. In this respect Dr. Pritchett says:

"We have now come, as it seems to me, to a point where the Agricultural College ought clearly to define its own mission. That mission seems to me to be the work of a true college with its experts and experiment stations and its means of distribution. The time has come when it must be clearly admitted that such a College can contribute only indirectly to trade education. Once this is admitted the place of such an institution becomes distinctive and clearly outlined, and under such a conception the agricultural and mechanical colleges should hold to college standards and drop secondary education altogether."

Dr. David Starr Jordan, President of Leland Stanford, Jr., University, of California, says in part:

"Concentration gives strength. The agriculturalist needs the work in language, literature, mathematics, etc., as given in the University. The University needs the strengthening presence of agriculture and its student. A University means a place for all forms of training. The Department of Agriculture should be developed to the very highest degree. It is, however, I believe, a mistake to suppose that agriculture, or medicine, or law, or engineering, can be effectively taught in schools devoted absolutely to the single subject, away from Universities and away from each other. The agricultural work strengthens the rest of the University, and on the other hand the Agricultural Department needs to draw on all the language teaching, mathematical teaching, science and other teaching which is characteristic of the University."

What we would covet for British Columbia would be such an agricultural college in the university, having as its preparatory

schools, experimental and model farms in different sections of the Province, each farm having its agricultural trade school for the training of the coming farmers of its community.

We claim that the Lower Mainland offers greater opportunities than any other part of the Province to such an agricultural college of university calibre, developed as a department of the university.

It has been shown in a previous section that in, and tributary to the Lower Mainland, we have by far the most varied and extensive farming communities of the Province. The bottom delta lands of the Fraser constitute one of our most valuable assets, the higher lands of the Valley are typical of the whole coast and island region. The irrigated fruit lands of the Similkameen will be within easy reach when the lines over the Hope Mountains are completed, while the irrigated districts of the Upper Fraser, Thompson and Okanagan valleys are already tributary to this district.

From a commercial standpoint the location is close to the base of supplies, not only for provincial but tropical and sub-tropical sources, thus giving ample opportunity for studying international methods of packing, marking, and the general handling and marketing of commercial products. In the market work there is most convenient access to commercial and local marketing and the greatest facility for the study of export and import problems. On the subject of transportation there would be a great diversity of opportunity for studying steamboat work in both salt water and fresh water trade, electric and steam railway work, coastwise, ocean and river service, carriers for large city and open markets, etc.

Attention is called to the advice of great educators in the matter of the place of the Agricultural College in the university as given incidentally in Part VII. of this memorandum.

11.—School of Forestry.

1. The whole trend of professional opinion both in America and Europe is in favor of forestry schools being most intimately associated with the larger universities, both as regards location and administration. A notable example of this trend of opinion is the recent removal of the British Forest School from Cooper's Hill to Oxford, where it has become a Department of Oxford University.

The advantages of such intimate association are mutual. The University may provide in a way rarely possible in an independent Forestry School for the teaching of the mathematical, scientific and other non-technical courses. On the other hand the Forestry School may, and should, adapt many of its technical and semi-

technical courses (e.g., timber physics) so as to be of the utmost interest and value to engineers, architects and other students.

2. Aside from proximity to the University, the two points of prime importance to be considered in locating a School of Forestry are the relation of the site to opportunity for field work and for studies in the utilization and distribution of forest products.

It is evident that the Lower Mainland is the most central point from which to reach the various forest regions of the Province. Of even greater advantage is the fact that a greater variety of forest types may be found in its immediate vicinity than in any other portion of the Province, making possible an almost endless variety of one-day field excursions.

3. The Lower Mainland is now and must always remain the greatest centre for the utilization and distribution of forest products in the Province. The facilities for the study of these features of forest work are at the present time not only unapproached in any other district of the Province, but are unsurpassed anywhere in the whole world.

The immediate future promises additional facilities in this regard in the further development of the wood pulp industry, the establishment of a paper manufacturing industry, the erection of a steam turbine mill, with all machines driven as separate units electrically, the manufacture of turpentine and other products from present waste, and in many other directions.

PART V.

The Influence of Location Upon the Development of Other Universities.

(A) From the experience of the State Universities of this Continent we may learn:—

(1) That where the State University was originally placed in the largest centre of population or in close proximity thereto, it has proved a success and has developed into the greatest institution of its state in point of attendance and standing. There has been no need to establish other state colleges at other points. This is shown by the results in sixteen States of the American Union, and the Provinces of Ontario and Manitoba in Canada.

States where the State University was placed in close proximity to the largest centre of population:—

Name of State	Date of Found. of State Univ.	Attendance Compared with Other Colleges in the Same State	Attendance of Second College
Arizona	1885	No others	
California	1869	Largest (3452)	Stanford 1686
Delaware	1833	No others	
Kansas	1864	(a) Only large Univ. (2210)	Bethany 896
Michigan	1837	Only large Univ. (4720)	Agri. Coll. 1142
Minnesota	1851	Only large Univ. (4667)	St. Olaf 497
Nebraska	1869	Only large Univ. (3266)	Wesleyan (920)
Nevada	1886	No others	
North Carolina	1789	Largest (786)	Shaw Univ. 531
Oklahoma (b)	1890-92 (Agri. Coll.)	Largest 636 (651)	Oklahoma Coll. 611
Utah	1850	Largest (805)	Brigham Young Coll. 734
Vermont	1791	Largest (537)	Middlebury 228
Washington	1859	Largest (1679)	State Coll. 660
Wisconsin	1838	Only large Univ. (4521)	Concordia 911
Texas	1883	Only large Univ. (1833)	Baylor 979
Wyoming	1886	No others	

(a)—Not including Kansas Agricultural College

(b)—Considered by Carnegie Foundation in too small a centre, tho' close to Oklahoma City

N.B.—District of Columbia has three large colleges all Washington City.

(2) That where the State Universities were originally located at a considerable distance from the largest centre of population there have very frequently sprung up in those centres previous to or since the founding of the State Universities, universities which in standing and attendance have outdistanced the State Colleges. This has been the case in nine of the United States.

States in which the State University was originally placed away from centre of population, and where the centres have established more flourishing institutions:—

State	Location of State College	Date of Found.	Attendance	Other Large Colleges in the State	Date	Attendance
Colorado	Boulder	1861	1,041	Denver College, Denver	1864	1324
Georgia	Athens	1785	502	Atlanta Bapt. Atlanta ..	1867	1,259
				Atlanta Univ., Atlanta ..	1867	
				Georgia Tech. School ..	1888	
				Morris Brown College ..	1885	
Illinois	Urbana	1867	4,633	Univ. of Chicago, Chicago	1892	6,360
				N. W. Univ., Evanston	1851	4,283
				Armour Inst. of Technology, Chicago.....	1895	808
				Louis Inst., Chicago ...	1896	1,177
Kentucky	Lexington	1865	645	Univ. Louisville, Louisville	1837	988
Louisiana	Baton Rouge	1877	657	Tulane Univ., New Orleans	1845	1,087
Ohio	Athens	1804	1,035	Univ. Cincinnati, Cincinnati	1874	1,394
				Ohio State Univ., Columbus	1870	1,351
Rhode Is.	Kingston	1892	284	Brown, Univ., Providence	1764	993
Tennessee	Knoxville	1794	887	Vanderbilt University ..	1872	988
				Univ. of Nashville.....	1826	1,112
				Walden University	1866	843
				Fiske Univ., Nashville..	1867	350
Pennsylvania	State College	1859	1,209	University of Penn.....	1755	4,126
				Temple University	1888	1,648
				Cent. High School, Phila.	1838	2,223
				Univ. of Pittsburgh, Pittsburgh	1819	1,243

(3) That where there have been long established universities in the greatest centres of population these have proved sufficient for the purposes of higher education and the state has felt no need to establish an institution under government control. Of this we have five examples in the United States, and the Province of Quebec in Canada.

States where there are no State Universities, but others, mainly in large centres, have proved sufficient:—

State	Chief University	Situation	Date of Found.	Attendance
Connecticut	Yale	New Haven	1701	3,434
Maryland	John Hopkins	Baltimore	1867	731
Massachusetts	Harvard	Cambridge	1638	3,918
	Boston	Boston	1869	1,244
	Mass. Inst. of Technology	Boston	1861	1,462
New Hampshire	Dartmouth	Hanover	1769	1,233
New York	Columbia	New York	1810	4,750
	College of N. Y. City	New York	1854	4,611
	New York University	New York	1831	3,695
	Polytechnic	Brooklyn	1854	1,364
	Cornell	Ithaca	1865	3,985

(4) That where the State University was placed away from the chief centre of population and no larger and more important university has yet sprung up, we find—

(a) That in seven out of twelve cases the state has found it advisable to establish other government colleges in other locations, thus incurring all the disadvantages of decentralization.

(b) In two notable cases, Iowa and Missouri, colleges established in the chief centre of population later than the foundation of the State University, have had a very rapid growth and reached a high standard.

States where State University was placed in a situation remote from a large centre of population and where no other larger college has sprung up.

Name	Date of Found.	Site of State University	Other State Colleges	Location	Date
Alabama	1820	Univ. Alabama	Ala. Polytechnic	Auburn	1872
Arkansas	1871	Fayetteville			
Idaho	1889	Moscow			
Indiana	1828	Bloomington	Purdue Univ.	La Fayette	1862
Iowa	1847	Iowa City	Coll. of Agri. & Mechanic Arts	Ames	1858
Maine	1865	Orono			
Oregon (c)	1876	Eugene	Agri. College	Corvallis	1870
South Dakota	1862	Vermillion	School of Mines	Rapid City	1886
Virginia	1819	University	Polytechnic Inst.	Blacksburg	1872
W. Virginia	1868	Morgantown			
Missouri (b)	1839	Columbia			

Montana has three State Institutions but no great centre of population.

(a) Iowa—Drake University (Des Moines), 1,789 students, founded 1881.

Iowa State University, 2,437 students, founded 1847.

Illustrating tendency to develop a University in the large centre.

(b) Missouri—State University, 2,856 students, founded 1839.

St. Louis University, 1,078 students, founded 1832.

Washington University (St. Louis), 1,058 students, founded 1853.

Christian Bros. College (St. Louis), 502 students, founded 1851.

Illustrated the same. Situation of State University condemned by Dr. Pritchett.

(c) University of Oregon has its Law and Medical Departments in Portland, Ore., and a new independent college is now being established in that city.

B.—The European Universities.

England perhaps the most conservative country in the world in the development of educational systems. The spirit of Oxford and Cambridge has guided the life of England for centuries. Nevertheless, in response to the imperative demands of modern conditions, the newer universities are being established, not in environments similar to those of Oxford and Cambridge, but actually in the heart of large industrial centres. The universities of London, Liverpool, Manchester, Birmingham, Bristol and Sheffield have already a greater attendance than those of Oxford and Cambridge, and their numbers are rapidly increasing.

In Scotland, all the large universities have from the beginning been in the centres of population, and they have long been in the front rank.

Moreover, the great progressive "Arbeit" universities of Germany are those established in the large cities of Berlin, Leipzig, Munich and Dresden.

The universities in small cities, while, perhaps, retaining their reputations in art and pure sciences, are not taking a leading part in the development of German national life like the sister universities of the greater centres. The same may be said of the institutions of France and Austria.

If the theoretically ideal site for a university were in a rural district or a small city, the fact would still remain that students cannot be induced to attend institutions so located, whereas there is never any lack of students at universities situated in or near

large centres, and the influence of the latter is correspondingly greater. We can see no reason why the same should not hold true in British Columbia.

6. Dr. Pritchett, in many places in his reports, earnestly recommends that the University should be in the centre of population, e.g., in 3rd annual report of Carnegie Foundation, page 80.

"Nothing has been more striking in the development of the State Universities and Colleges than the general lack of appreciation of the value of a fitting environment in the upbuilding and development of a college or university. Such institutions have often been placed by the vote of the legislature in accordance with geographical or political considerations, without the slightest appreciation of the fact that the interests not only of education but of the people of the whole State were being sacrificed. In many cases these institutions have been founded in little villages near the geographic centre of the state without regard either to the possibilities of a university in or near a large city, or to the question of transportation facilities. For example, the University of Missouri and the University of Illinois, both in great and rich states, are in villages, and so situated that it is very difficult to reach them from many parts of the state. Each of them conducts part of its professional instruction in a distant city. If the one had been originally placed in the suburbs of St. Louis, and the other in the immediate vicinity of Chicago, the interests of education and of the public would have been served.

"Perhaps one of the most glaring cases is in the State of Colorado. Denver, the chief city of Colorado, is also its capital and the centre of its transportation system. It was the one obvious place in which the State University ought to have been situated, alike in the interest of the people of the whole State and of education itself. Instead, the State institution was split into three parts, and each of these located in a small and comparatively inaccessible place.

"On the other hand, some states have dealt with wise forethought, concentrating their efforts into the development of one great institution and placed this in a centre of population and transportation. The University of Wisconsin at Madison, the capital of the State and a city of refinement and beauty; the University of California at Berkeley, adjoining San Francisco; the University of Minnesota at Minneapolis, are examples of such solutions. It is worth much to a boy from a small town to live during his college years in touch with a great community like San Francisco or Minneapolis-St. Paul. The general opportunities for culture, refinement and intercourse with men are far better in such places. In the long run, universities in isolated towns are apt to reach limits beyond which they cannot go, and in many cases are compelled to conduct part of their work—for example, the professional schools of law and medicine—in cities.

The real question which a State should solve in founding a university or a college is: Where may the institution be so placed as to secure the best results for the education of those who are to attend it and to serve at the same time the interests of all the people of the State? To answer such a question intelligently, one ought to consider other agencies of higher education in the State, the advantages of location, the presence of a large and cultured community, the ease and economy of transportation for the whole population.

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"Separated from the dust of the political campaign which has somewhat obscured the view of the public, the bare facts are these: The University of Oklahoma was established some seventeen years ago at the small town of Norman on the Santa Fe Railroad. The then territory of Oklahoma followed the example of most Western States and unfortunately placed its State University in a small village instead of a centre of population and transportation. Like most state institutions of its region, the University has grown and flourished. Its president proved an effective officer and at the time the Carnegie Foundation was established, the Oklahoma University was the only State University in the South whose entrance requirements equalled those of good colleges in other parts of the United States.

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"The regents of the Oklahoma University have it in their power to render a signal service to education and to their State. Just north of Norman is Oklahoma City, a centre of population and transportation, the obviously fit site for their State University. If the governing board of the University of Oklahoma will address themselves seriously and energetically to the problem of the removal of the University and its housing in suitable quarters in the outskirts of Oklahoma City on a plan commensurate with the resources of this great new State, they will confer lasting honor on themselves and earn the gratitude of generations yet unborn. Such a movement is worthy of a great and progressive state.



PART VI.

In favour of centralizing all the work of the Provincial University we advance the following arguments:—

1. The general advantages to students where all departments of the University are centralized may be briefly outlined as follows:—

(a) The advantages in meeting as many men as possible of alert minds whose interests are along lines other than their own. This results in a widened outlook, increased mental stimulus and extended sympathies.

(b) Student organizations and activities are among the most important factors of the university life. These can be rendered much more efficient and of greater educational value in proportion to the numbers belonging to the organization.

(c) The physical training of students has of late years become one of the important features of the university curriculum. The equipment and instruction for this work can hardly be made efficient in separate small colleges.

(d) The old solidarity in student life has been destroyed by the widening of the curriculum and the failure of the dormitory system in the greater universities. Inter-collegiate sport is at present the one unifying factor in student life. This unity of student life in the Provincial University would be lost if the colleges were established in different localities. In this respect President Nichols of Dartmouth University says: "Intercollegiate sports do more to unite the whole college and give it a sense of solidarity than any other undergraduate activity, and thus serve a worthy purpose. Moreover, the lessons of sport are lessons of life, and it is the moral worth rather than the physical benefit of athletics which we can ill afford to lose from student life."

(e) Greater opportunities for combined courses are offered to students in a centralized university.

2. Needless duplication of course is avoided by centralization since many courses are taken in common by students attending colleges of Arts, Applied Science, Law, Medicine, Agriculture and Theology.

3. The centralized university could command a better staff, because—

(a) Greater inducements could be offered to men of the highest attainments in the various departments.

(b) Larger classes, in the purely lecture courses at any rate, mean a smaller proportion of professors to students, and therefore, less waste of funds.

4. Available funds being the same, there would be better equipment in the centralized university because of the absence of the duplication which must necessarily occur in separated colleges. It would be impossible to provide funds to efficiently equip those colleges which must be established in the near future.

5. The separation of state colleges means harmful rivalry for—

(a) Competition for students is apt to lead to the lowering of standards of work.

(b) When colleges are separated, political interests are likely to control the distribution of funds.

6. The relative advantages of centralization are now so clearly recognized that many colleges in America are being removed to their respective state universities.

7. As there is the possibility of an argument being advanced that the Lower Mainland is already equipped with the nucleus of a University in the Royal Institution, and that this would act to the disadvantage of the Provincial University if established there, we bring to the notice of the Commission a resolution of the Royal Institution. This resolution practically guarantees that there will not be two rival institutions in the Lower Mainland.

Resolution passed by the Royal Institution for the Advancement of Learning of British Columbia at a meeting held May 14th, 1909:

“Resolved, that should Vancouver or the immediate vicinity of Vancouver be chosen as the site of the Provincial University, this Board is prepared to hand over the work now being carried on in McGill University College by the Royal Institution to the Board of the Provincial University.”

8. Our arguments against any establishment of different colleges of the University in different sections of the Province are practically summed up by Dr. Pritchett in the 3rd annual report of the Carnegie Foundation, page 80:

“For example, the locations of the State University and of the State College of Agriculture have in too many cases been determined upon political or local considerations. In some cases one section of the State has been given the State University, another the State College, and in some States, like Michigan and Colorado, three State Colleges have been formed—the State University, the State School of Mines, and the College of Agriculture and Mechanic Arts. These divisions have rarely been justified, and in nearly all cases they have led to political wire-pulling in the Legislature in which the State University in one part of the State is played against the College of Agriculture or the Mining

School in another part of the State in the securing of appropriations. Not only is this true, but duplications of work follow with endless rivalries. One of the most conspicuous of these cases is to be seen in the State of Iowa, where the State University and the State College of Agriculture and the Mechanic Arts have each built up large engineering departments. The State of Iowa is at the present time supporting two competing Schools of Engineering. Not content with this, the State Normal School has been allowed to start an undergraduate college and to confer academic degrees. On the three institutions the State of Iowa expended in the year 1907-8, \$1,196,754."

PART VII.

The Opinion of Leading Educationalists.

Upon the question of the advisability of locating a Provincial University in the vicinity of the chief centre of population in the Province, we sought the advice of the Presidents and heads of faculties of the leading Universities in the United States, Dr. Pritchett, President of the Carnegie Foundation, and prominent Canadian educationalists.

We have received replies from almost all those to whom letters were sent, and with the exception of Dr. Pritchett and the Canadian University Presidents, all have favoured us with their opinions. The former naturally felt that he could not express any opinion except at the invitation of the Minister of Education, who had already asked him to serve on the Commission. It can readily be seen that the latter might be considered as interested parties and so do not wish to commit themselves in any way upon the question.

In the words of President Hall of Clark University, appearing in the University Magazine of April, 1910, "it is difficult to get an unbiased opinion concerning the relative merits of a rural and an urban site for a university from the heads of colleges, because they are committed by the situation of their own institutions and make special pleas defending their status quo."

Still we cannot but be struck with the fact that all those who favoured the committee with their views, whether their institutions are situated in large or small centres, are agreed in recommending the vicinity of the largest centre of population as the most advantageous site for a Provincial University, and are also unanimous in advocating the concentration of all the University departments, including the College of Agriculture, upon one site.

We append a copy of the letter addressed to these educationalists and a literal copy of their replies.

Dear Sir.—

The Commission recently appointed by the Provincial Government of British Columbia to select a location for the Provincial University will meet during the present month.

In presenting to this Commission the claims of the Lower Mainland and its various locations we desire to obtain your opinions upon the following questions:

(1) Whether the Provincial University should be situated immediately in the centre of population of the Province?

(2) Whether the Provincial University should be in the vicinity of a large centre of population and how far distant from the latter?

(3) Whether the colleges of Law, Medicine, Applied Science and Agriculture should be on the same site as the colleges of Arts and Pure Sciences?

(4) Whether you would make an exception in the case of any one of these colleges as distinguished from the rest?

By favoring us with your views on these questions, and a brief statement of your reasons therefor, you will do us a great service in assisting the preparation of the claims of the Lower Mainland and the selection of sites suitable for the Provincial University. Have you any objection to our using your name publicly if we should desire to quote your opinions in support of our position?

We would be greatly obliged to hear from you at your earliest convenience.

Yours very sincerely,

J. G. DAVIDSON.

General Secretary Lower Mainland University Committee.

My Dear Sir,

In reply to your letter of May 13th, I would say that in my judgment it would be best that the Provincial University, for which a Commission is now seeking the best location, should be situated as nearly as may be at the center of the population of the Province.

It does not seem to me, however, that it should be built in immediate connection with a large center of population. It would be best, in my judgment, that it should be some ten or twelve miles away from such a center, in order that it might have an independent life of its own.

It seems to me very important that colleges of Law, Medicine, Applied Sciences, and Agriculture, should be on the same site as the colleges of Arts and Pure Sciences. Otherwise they are not dominated by a common university atmosphere and spirit.

If any exception should be made, it would be the College of Medicine, because of the necessity of having it in immediate connection with large hospitals, but I believe that with proper methods of transportation even this separation would not be necessary, and it is certainly most undesirable.

Hoping that these briefly expressed opinions will be of service to you.

Sincerely yours,

WOODROW WILSON.

President Princeton University, Princeton, N. J.

Dear Sir, -

In reply to your letter of May 9th, I will state:

2. In the matter of location the balance of advantage is decidedly in favor of the large city.

3. The American experience is a decisive one in favour of the union of all parts of the university at one place.

Very truly yours,

WM. L. BRYAN,

President Indiana University, Bloomington.

Note.—Population, 6,800; remote from large centres of population.
J. G. D.

Dear Sir,—

I do not feel like offering positive advice in the matter of the location of the Provincial University since my feeling is that there can be no fixed rules or principles governing such a matter, but that the decision must be governed largely by circumstances and conditions which are local.

Generally speaking, the location of a state institution should be made with large reference to the future, particularly in a country where so very great future developments are to be expected. The institution should be easily accessible from all parts of the Province. It should be in or near the centre of population where it may have the benefit of the advantages which are to be found in such centres. This is particularly true of professional schools.

I think also that there is an advantage on the side of combining all departments of the University at one place, although it is true in some of our states that the departments of Arts and Sciences have been separated without detriment to either. In establishing a new institution I am in favor of bringing all departments to one place. It is scarcely practicable to bring all of these departments on to one site unless you are willing to place the entire institution in the suburbs of your city.

The Agricultural School must of necessity have large areas of land accessible, but this need not be immediately adjacent to the class rooms and laboratories, which latter should be in close contact with other similar branches of the University.

One thing to be avoided, it seems to me, is the segregation of any one department or school or class of students from all the others. A decided benefit from the University organization is the contact which students in the different departments will have with the entire University body. This ought to be preserved.

Very truly yours

W. E. STANLEY,

President Purdue University, Lafayette, Indiana.

Dear Sir,

Your favor of the 9th inst. is received. In answer to your questions I should say:

1. It seems to me desirable for the Provincial University to be situated at or near the metropolis of the Province. That would seem to me to answer also the second question.

3. It would seem to be advisable for the other colleges to be in immediate connection with the University.

4. I can see no reason for any exception applying to any of them. Of course, the agricultural college would need to have its farm not very far away.

Of course I have no objection to your using my opinion if you care to do so.

Very truly yours,

HARRY PRATT JUDSON,
President of University of Chicago.

My Dear Sir,

I have your letter of the seventh. I cannot judge as to the location of your Provincial University as I am not well enough acquainted with conditions in British Columbia; but I can answer the three last questions in general terms.

Question 2. A large university should certainly be placed in the neighborhood of a large city, if possible not more than ten miles distant. This is necessary in order to keep your professors alive; off in the country they are likely to hibernate, they go to seed. They ought to be near enough to a city to get the flush of its life.

Question 3. Most assuredly should the Colleges of Law, Medicine, Applied Science, and Agriculture be on the same site as the colleges of Arts and Pure Sciences.

Question 4. I would make no exception. We have made in the U. S. ample experimentation with the separate location of the Agricultural College, and find it is a mistake. Our strongest agricultural colleges have been those that are entirely amalgamated with the State University; for instance, those at Wisconsin, Illinois, Minnesota, and Missouri. The experience of the States which have established separate colleges is a warning.

Very sincerely yours,

BENJ. L. WHEELER,
President University of California.

My Dear Sir,—

I have your letter of May 9, and answer your inquiries with some hesitation since the answers might need modification if I

knew of the local conditions. You are at liberty to quote what I say.

1. It is wise to place a Provincial University not necessarily in the geographical middle of a province, but at the center of influence, especially if this is a point conveniently reached from all parts of the territory served. Many of the state universities in the United States were located as near as possible to a geographical centre, but in some cases this point has proved to be difficult to reach.

2. The Provincial University should, in my opinion, be in the vicinity of a large centre of population—near the metropolis, unless this is already equipped with a university. It should be far enough from the centre of the city to allow a large campus, and the danger is that the amount of land needed will be greatly under-estimated. Expansion should be allowed for with great liberality, and provision should be made not only for many educational buildings, but for play-grounds, athletic grounds, and space for dormitory systems. The university should not be so distant, however, that it will be difficult of access by street cars, nor so distant that it may not touch the life of the city and command its interest as a local enterprise.

3. The Colleges of Law, Applied Science, and Agriculture should be on the same site as the Colleges of Arts and Pure Sciences.

4. It will be an advantage if at least two years of the College of Medicine can be provided for at the same place. The clinical work of the College of Medicine must be provided for in the heart of the city where material may be obtained and in close proximity to hospitals.

Yours very truly,

A. W. HARRIS,

President Northwestern University, Evanston and Chicago.

Dear Professor Davidson,—

In answer to your questions I should have said that the Provincial University had better not be situated—except for its medical school—in a large city, but in its vicinity, and within easy access therefrom. It would be also my opinion that—save for the College of Medicine, which must be in the closest possible connection with the hospital—the Colleges of Law, Applied Science and Agriculture, had better be on the same site as the Colleges of Art and Pure Science. I think in this way you build up a university community with a larger and more influential life.

Yours very truly,

A. LAWRENCE LOWELL,

President Harvard University.

My Dear Doctor Davidson,—

President Henry Churchill King is absent in Japan, giving some lectures before educational institutions in that Empire, and to me, as Chairman of the Executive Committee in his absence, your letter has been referred for reply.

For colleges of Law and Medicine, the presence of provincial courts and hospitals, with a considerable number of cases for observation, seems indispensable. In both of these colleges, also, the custom which prevails of using specialists for lectures on specialties would seem to point to the importance of locating the Provincial University in a large centre of population. For the same reason, the School of Applied Science needs to be located within easy access of large manufacturing establishments that the students may have at first hand the actual application of the principles they are studying. All these considerations seem to point, in my judgment, to the importance of locating the Provincial University in the vicinity of a large centre of population, near enough so that such specialists as I have indicated can easily reach the University and such trips as are called for in the School of Applied Science may be readily made without interfering with the daily work.

On the other hand, the College of Agriculture needs to be located in an agricultural region where experimental farms, buildings for the dairy, etc., can be had without taking land of great value for building purposes. Such a college should also be located, it seems to me, to show the possibilities of land which is about the average land in the Province. If the college is located upon one of the best places in the Province its results will not be practicable for the small farms in regions of less desirable land.

If any exception is to be made as to the separation of any one college from the others, I should say the College of Agriculture presents the special case.

I am, Sir,

Sincerely yours,

AZARIAH S. ROOT,

Chairman Executive Committee,

Oberlin College,

Oberlin, Ohio.

Dear Sir,—

Permit me to say that I have several times recently visited Vancouver and the neighboring region, and have been very much interested in the university problem.

I would say that the best location for the Provincial University would be at some beautiful and desirable spot, sufficiently populous to enable professors to live comfortably, but at a distance of ten to twenty miles from the centre of the city. I have

been very greatly impressed with the wisdom of the location of this institution, at a distance of thirty miles from San Francisco, just far enough so that the student body will reside about the university, and be disconnected during the term time from the social and other distractions of the city itself.

Broadly speaking, I should say that the best possible place for a university of the type of yours is at a distance of twenty to thirty miles from the largest available centre of population. I should say that it is decidedly better that the professional colleges should be at the same place, as near as may be. The Department of Agriculture will render it necessary to have suitable farms. Possibly these cannot be obtained near Vancouver, but if so, it would be well to locate the entire institution at a point accessible to these farms. Law and Applied Sciences can be handled better than in the city. If you can have an adequate hospital built on the university grounds, twenty or thirty miles from the city, then medicine could be taught there to advantage. Otherwise the clinical work must of necessity be in the city. At Stanford we have arranged to give a year and a half; that is, physiology, chemistry, bacteriology, pharmacology and anatomy, on the university grounds, and its remaining two and one-half years of clinical work in the city.

Concentration strengthens all these departments. The nearer together they are, and the more the spirit of the one permeates the others, the better for all concerned; and it is certainly better, in your beautiful country, to give ample elbow room and place the university at some point not too near the city, but where a local village might grow up. There are many attractive places about Vancouver which have occurred to me as suitable, and I shall look with great interest for the development of your institution.

I may say again that, with all the possibilities of forest and gardens which you have at Vancouver, it would be a very great mistake to crowd the university into the heart of the city, as for instance has been done at Liverpool, where there is not even a spear of green grass on the university grounds.

You are entirely at liberty to use my name in connection with what I have said.

Very truly yours,

DAVID STARR JORDAN.
President Leland Stanford Junior University.

My Dear Sir,—

In answer to your letter of May 9th I beg to say that while I do not know the circumstances of course, which ought to be finally decisive in the case of the location of a Provincial University for British Columbia, I have very decided ideas as to the desirable location for a great university.

First of all, other things being equal, I should think it would be well to have the university as near the centre of population, i. e., the ultimate centre of population, as possible.

2. I think there is no doubt that the best location for a university is near a large centre of population; the nearer the better.

3. I think it is a great advantage to an institution to have all the colleges, Law, Medicine, Applied Science and Agriculture, on the same site and in immediate connection with the Colleges of Arts and Pure Sciences.

4. It might be necessary, in case a university is not located as I have indicated above, to provide in the case of its medical school for clinical facilities in some centre of population.

I have no objection to your using my name publicly if it is understood distinctly that I am giving my opinion in regard to what is desirable on general principles, and not an attempt to form an opinion in any way as to the particular problem before the people of British Columbia.

After all, any such question as this has to be settled upon the basis of a concrete situation, which oftentimes makes it impossible to carry out what on general principles is most desirable.

Faithfully yours,

EDMUND J. JAMES,
Principal, University of Illinois.

Dear Sir,—

In reply to your letter of May 7th on the subject of the location of the Provincial University of British Columbia, President Schurman directs me to say that his knowledge of the conditions of the Province are not such as to warrant any expression of opinion on his part, except that in reply to your third question he is decidedly of the opinion that the colleges for Law, Medicine, Applied Sciences and Agriculture should be on the same site as the colleges of Art and Pure Sciences. He believes that all these colleges should be kept together and be constituent parts of the university.

Very truly yours,

R. C. EDLUND, President's Secretary,
Cornell University,
Ithaca, New York.

Dear Sir,—

I have your favor of the 9th, and in reply would say that I believe the great universities should be in the center of a large population for two reasons. First, it gives the faculties and

students an opportunity of observing the life for which students are being prepared, and secondly, it is desirable for such centers to have the influence that comes from the free thought and discussion of all public questions by the university.

While it is desirable that a university for a Province or State should be situated at a point accessible for everyone, it is more important that the place selected should be right in the above particulars than that it should be in the center of population.

I regard it as desirable that the colleges of Law, Medicine, Applied Science and Agriculture should be located in connection with the college of Arts and Pure Sciences. There is a distinct university method of teaching in these colleges, now being adopted by the best universities, which is in accord with some of the methods of teaching in the colleges of Liberal Arts. I mean by this the Case system of teaching Law, the Laboratory and Clinical system of teaching in Medicine, and the Observation Method in Applied Sciences and Agriculture. I have observed that the influence of the colleges of Arts and Pure Sciences upon these departments is of great value in maintaining university standards and methods. I do not think the influence of technical schools upon the college of Arts and Sciences objectionable. In these days, when the aim of every university should be to make efficient men, it is well for those in the Liberal Arts department to feel that they are fitting themselves broadly for subsequent specialization in the professional schools.

Wishing you success in your great undertaking, I am,

Sincerely yours,

CHAS. W. NEEDHAM,

President of the George Washington University,

Washington, D. C.

President J. M. Tillman, LL. D.,

University of Arkansas,

Fayetteville, Ark.

Answers:

"Yes" in reply to question (1).

"Yes" in reply to question (3).

"No" in reply to question (4).

My Dear Sir,—

You ought, by all means, to locate your Provincial University near a large central population. It is impossible for a college of Applied Science to do its work successfully in the country. You ought to be near great factories.

Faithfully yours,

F. W. GUNSAULUS, President,

Armour Institute of Technology, Chicago.

Dear Sir,—

Your letter of the 10th, asking my opinion upon three points with regard to the establishment of the new Provincial University of British Columbia, has been received. I fear that my knowledge of conditions in British Columbia is entirely too insufficient for me to give an opinion that will be of practical value. I have no hesitation in saying, however, that in general terms it seems to me most advisable that a university should be located at or near a large centre of population, and that this is particularly necessary in the case of a medical college, which must have clinical material for work in the latter part of the course. In this country the universities which have established medical departments near small towns have been seriously handicapped in this particular. They have found that the material that comes into the hospital is chiefly made up of chronic cases. I believe that they have had difficulty in holding their students in the latter two years of the course largely on this account.

In regard to your third question I am thoroughly convinced that the Medical college should be an integral part of a university, and it is most helpful when the medical department is located on the same campus as the college of Arts and Pure Sciences, or the faculty of philosophy. I believe that all the leaders of medical education in this country recognise this fact and, wherever possible, are seeking to bring the two departments of the university together in this way. The advantage is, perhaps, chiefly to the medical department in that it is brought under academic influences. We feel this need more in this country perhaps than you do in Canada, because we are evolving out of the proprietary system of medical school into the university system.

Very truly yours,

W. H. HOWELL, Dean,

Medical Department,
Johns Hopkins University,
Baltimore, Md.

My Dear Dr. Davidson,—

Answering your letter of May 10th, 1910, asking an expression of opinion upon questions bearing upon the location of the Provincial University of British Columbia and the relations of the proposed Medical school, I beg to reply affirmatively to all three questions propounded. The university will find the greater advantage in being located in some large center of population; the Medical school cannot be properly conducted without the clinical material which such a location alone can readily offer, and it will reach its best development if closely associated with the general university, because of the special opportunities in general culture and the sciences cognate to medicine which

such relation will afford. Merely legal connection with actual spacial separation is by no means ideal. I have been personally connected with institutions following each of these plans and unhesitatingly advise the establishment of the school of Medicine in the same city and, if possible, on the same campus with the rest of the university schools.

Very sincerely yours,

ALLEN A. SMITH, Dean,
School of Medicine,
University of Pennsylvania,
Philadelphia, Pa.

First question. Answer: It depends upon as many varying circumstances that I cannot answer in general terms.

Second question. Answer: Yes, most emphatically.

Third question. Answer: Not necessarily so, though there might be an economy of administration which would make it worth while.

J. W. HOLLAND,
Dean of Jefferson Medical College,
Philadelphia, Pa.

Dear Professor Davidson,—

In answer to your questions, I believe that a university—for the sake of its departments of Medicine, Law and Dentistry—should be in a large center of population. This is not merely for these departments, but that there may be a close affiliation among all of the scientific branches, both in the college of Arts and in the departments. For the students, also, there is a great advantage in association with the Liberal Arts and the influence of the university is enhanced.

Hoping this short reply adequately covers the questions, I remain,

Very sincerely yours,

ARTHUR R. EDWARDS,
Dean, Northwestern University Medical School,
Chicago, Ill.

Dear Sir,—

Your letter of the 10th inst. in regard to questions of location for a university and a college of Applied Science is at hand. I am glad to give you all the information I have upon the subject.

1. There are many reasons for and against locating a university near the center of a large population. Some of the reasons why it is desirable to do so:

- (a) Faculty and students have the advantages of lectures, libraries, theatres, etc., which they cannot have in a small place.
- (b) Faculty and students have the advantage of social life, which is not possible in a small place.
- (c) A larger number of people come to take an interest in the university, and this is of great advantage to the institution in the way of securing funds, students, etc.

Some of the advantages of being in a country locality are:

- (a) That the members of the faculty are able to devote themselves exclusively to their teaching and research work, because there are no distractions in the form of social matters, entertainments, etc.
- (b) Students find more time for study than in the larger place.
- (c) The moral influences surrounding them are better than near a large city.
- (d) While there are fewer people to take an interest in the university than when the latter is near a large city, yet they have a higher respect for and a more concentrated interest in the university work, because there are fewer objects for them to take a deep interest in.

2. There is no doubt in my mind that a College of Applied Science should be near a large center. The principal work of a College of Applied Science is engineering. Quite a considerable part of this work should consist in visits to manufacturing establishments where students should become familiar with modern methods of work. Lectures on practical engineering subjects should be given by engineers and manufacturers, and if the college is near a large city such lecturers can readily be obtained. If the college is situated in a large city, manufacturers and engineers residing there will take a great interest in it and wish to employ its graduates, and the under-graduates are more likely to obtain positions during vacations than they are if the college is situated in a small place.

There should be about the university an atmosphere of culture and refinement. This atmosphere may exist in a large city or in the country—there is a great difference of opinion as to whether it is best nurtured in one place or the other—but the atmosphere about the College of Applied Science is one of energy and activity. Its students are being trained to do things and they ought to be near the city where things are being done.

3. The advantage of having the College of Applied Science on the same site as the other departments of the university is that this prevents unnecessary duplication of the work. Many of the studies of the first part of the course of Applied Science are the same as those of the first part of the course in Arts and Science. One professor of mathematics, for instance, can just as well have charge of the mathematical work of all students in the university. If all parts of the institution were together this would naturally be the case, but if the College of Applied Science were separated from the other departments it would be necessary to have two full professors of mathematics. The expense would be greater and the work no better done. The same would be true in many other departments, such as English, Modern Languages, Physics, Chemistry, etc. There would also be an unnecessary duplication of the buildings for work of this kind. Another advantage of having all departments together is that the students and teachers in the preparatory schools have their attention drawn to one institution and one place, hence their interest is concentrated. There is a feeling that all students who are looking toward a higher education will go to this university, entering the department which appeals to them most.

The disadvantages of having a School of Applied Science connected with the department of Arts and Science are:

- (a) As a rule, the president of a university is not a scientific man, and does not sympathize very much with the work in Applied Science; this may not be the case in your university, but it is so in many institutions in our country. Many of our university presidents and some members of the faculties of Arts do not regard a School of Applied Science as a real educational department of the university, but they look upon it as a sort of trade school. This is due, of course, to a mistaken idea on their part that a classical education is the only real education and to their ignorance in regard to the work done in a department of Applied Science. Under these circumstances, of course, the department of Applied Science does not prosper as it should.
- (b) In a university the department of Applied Science is one of many departments, and the trustees and the president can give it but little attention. When the School of Applied Science is separate its trustees and president have but one thought in regard to the institution—that is to make it as strong as possible—in the line of technological work. As I am connected with a School of Applied Science which stands by itself I am undoubtedly prejudiced in favor of a similar organization; if, however, the university authorities are thoroughly in sympathy with

technological work I see no reason why a School of Applied Science should not be on the same site with the other departments of the university.

I fear that I have taken more space to answer your questions than you intended me to, but you need not use any more of it than you need.

Very truly yours,

CHARLES S. HOWE,
President of the Case School of Applied Science,
Cleveland, Ohio.

Dear Sir,—

In my opinion it would be a distinct advantage to locate the Provincial University near a large center of population.

Second. In my opinion it would be best to have the medical department situated at the same center, and

Third. It would be a distinct advantage, in my opinion, to have the medical college situated upon the same site as the college of Arts and Pure Sciences.

Very truly yours,

FRANK BILLINGS,
Professor of Medicine,
University of Chicago and Rush Medical College,
Chicago, Ill.

Dear Sir,—

To the questions embodied in your letter of the 10th instant, I submit the following answers:

1. The Provincial University should be located near a large centre of population.

2. The Medical College should be at such a centre and within easy reach of the best hospitals.

3. It does not seem to me desirable that the Medical college should be very near other departments of the university or so far from them as to greatly impair the intimacy of the relationship.

Courteously yours,

WM. E. QUINE, Dean,
College of Physicians and Surgeons,
University of Illinois.

PART VIII.

Possible Sites.

This Committee wishes it to be distinctly understood that we advocate no particular site, and indeed there is no question of such a choice being made at this time. However, the fact that numerous magnificent sites are available in this district must certainly increase its suitability for the object under consideration. We have rural, suburban and urban sites within twelve miles of the cities of New Westminster and Vancouver. The members of the Commission will be asked to visit the various municipalities and examine the suggested sites. At such times the particular merits of each locality will be explained by local committees.



APPENDIX.

Report of the Commission.

Victoria, B. C., June 28, 1910.

To His Honor the Lieut.-Governor in Council.

Sir:—The university site commission begs to submit the following report:

In accordance with the provisions of the University Site Commission Act, 1910, your commissioners have visited and made a careful examination of several cities and rural districts suggested as suitable university sites and have selected as the location for the university the vicinity of the city of Vancouver.

We have the honor to be, sir, your obedient servants:

(Signed) R. C. WELDON, Chairman.

G. DAUTH.

C. C. JONES.

O. D. SKELTON

WALTER C. MURRAY, Secretary.

Accompanying this report-in-chief embodying the finding of the commissioners is an auxiliary report addressed to the Minister of Education, Hon. Dr. Young, which reads as follows:

"The University Site Commission is strongly of the opinion that the university should not be placed on a site which may in time be completely surrounded by a city. They respectfully suggest that not less than 250 acres be set apart for the university campus and 700 acres for experimental purposes in agriculture and forestry. This is exclusive of a forest reserve for forestry operations on a large scale.

"The commissioners are of the opinion that the most suitable site is at Point Grey, unless the soils there and that of the Delta land adjacent are found to be unsuitable for experimental work of the college of agriculture. Should Point Grey prove impossible the commissioners suggest:

First—A site along the shore west of North Vancouver, provided the tunnel and bridge are constructed.

Second—St. Mary's Hill overlooking the Pitt, Fraser and Coquitlam rivers, provided residences are erected for the students.

Central Park, although conveniently situated, will probably be surrounded by the cities of Vancouver and New Westminster, and because of this and of the absence of existing scenic advantages, is undesirable.

"While the commissioners are fully convinced that it is of the highest importance to have all the faculties of the university doing work of university grade located together, they believe the diverse conditions of agriculture in this province make it advisable to divide the work of agricultural education between the college of agriculture at the university and schools of agriculture of secondary grade located in different centres. The college of agriculture should conduct researches, provide courses leading to a degree, supervise the extension work and schools of agriculture. These schools should be established in conjunction with the demonstration farms in typical centres and should provide short courses, extending over the winter months, of two or three years for the sons of farmers. Each school might specialize in one or more branches, such as horticulture, dairying, etc.

"Similarly, technical evening schools might be opened in the different coal mining centres, for the preparation of candidates for mining certificates, and in the metal districts for the assistance of prospectors and others."



